SIP PHONE

User Manual

1 Instruction

This user's manual is for VoIP Phone. It will explain the keypad instruction, web configuration and command line configuration for VoIP Phone. Before using VoIP Phone, some setup processes are required in order to make the VoIP Phone work properly. Please refer to the Setup Menu for further information.

Network feature

(1) Supports SIP 2.0 and 1.0 protocol

(2) Supports NAT transverse: STUN mode

(3) Supports static/dynamic WAN-IP-Addressing and PPPOE

(4) Supports in-band DTMF and out- band RFC2833 DTMF

(5) Supports proxy mode and peer-to-peer SIP link mode

High voice quality

(1) Codec: G.711 A/μ, G.723.1High/low, G.726 and G.729A/B

(2) Supports: VAD(voice activity detection), CNG(comfortable noise generator), LEC (line echo canceller), packet loss compensation and adaptive jitter buffer.

Easy to use

(1) 2 lines x 16 characters big LCD with blue backlight

(2) Can be configured through web browser, console/telnet or keypad

(3) Can upgrade firmware through HTTP, FTP or TFTP

(4) Call function: call hold, call waiting, call forward, caller ID and 3-way conference.

(5) Phone function: volume adjustment, speed dial, phone book, flash and speaker phone

(6) 2 RJ45 LAN port: one for internet and one for PC

Package contains

(1) One SIP-T9CM

(2) One universal power adaptor

(3) One Ethernet cable

2 IP Type

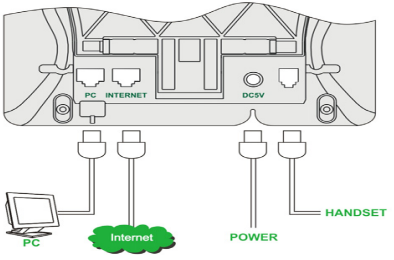
(1) Fixed IP client: Set network IP address manually.

(2) DHCP client: Set network IP address DHCP.

(3) PPPoE client: Set network IP address PPPoE.

3 Installation

3.1 Installation View



Please install your terminal as the connection chart above.

4 Ready to use

4.1 Get the IP

First of all, you should obtain the IP address of the terminal. After you connect the phone with your local network, it will get IP address automatically by DHCP (server assigned). Press MENU button and up/down to select the 'Network' menu and press ENTER, then press up/down to select the Status menu, then press ENTER.

You will see L for LAN port IP and W for WAN port IP. The default LAN port IP is 192.168.123.1.

4.2 Use the web based programming page

After getting correct IP, open an Internet Explorer browser on the PC which is connected with the same network as the terminal (Please ask your network administrator how to set your PC), then input the IP address in the Web page. At the end of IP address, please add the port number ":9999", for example: http://192.168.123.1:9999 and press Enter. You will see the login screen. The default account and password are

For admin user:

Account: root

Password: test

For normal user: (With this account you can not set some parameters, e.g. SIP domain)

Account: user

Password: test

4.3 Network Settings

Click the menu Network->WAN Settings and Network->LAN Settings to set the network parameters. Please consult your ISP or network administrator about it.

DHCP is default network type. Your terminal will get the required network parameters such as IP, subnet mask automatically. If your network uses static IP, you should set local IP, subnet mask, gateway IP, DNS1 and DNS2 first. If your network uses PPPoE, you should set PPP password first

4.4 Set time and SNTP server

Click the menu Phone Setting->SNTP Settings to set your SNTP server and time zone.

Note: If your service provider has pre-programmed some settings such as Primary Server, Secondary Server, Time Zone, Synchronic Time, and so on, you will not need to program these items.

4.5 SIP Settings

After you have the IP setting completed as above, you should set following parameters which are required to log in SIP

Server: Display Name, User Name, Register Name, Register Password, Domain Server, Proxy Server, SIP Port, RTP Port, DTMF setting.

4.6 Save Settings and Reboot

Simply chick the Save button and quit the browser after Configure OK screen appears, and then click Reboot button.

4.7 Normal Operation

After the terminal reboots, it will show the time and the account information.

4.8 Use Keypad to set this device

!Note: Before you set SIP Setting, you need to get authority in the menu Administrator->System Authority. You should input root's password here.

The input keys:

Key Name	Description
1	"1", "-", ",", "!", "?"
2	"2", "a", "b", "c", "A", "B", "C"
3	"3", "d", "e", "f", "D", "E", "F"
4	"4", "g", "h", "I", "G", "H", "I"
5	"5", "j", "k", "l", "J", "K", "L"
6	"6", "m", "n", "o", "M", "N", "O"
7	"7", "p", "q", "r", "s", "P", "Q", "R", 'S"
8	"8", "t", "u", "v", "T", "U", "V"
9	"9", "w", "x", "y", "z", "W", "X", "Y", "Z"
0	"0", "space"
*	"*", "•", ":", "@"
#	Start dialing process
MENU	This is the "Menu" key to set the IP Phone
UP/DOWN	This is Up↑/Down↓ key and volume setting when hook off. Incoming calls/dial calls when ready .
FWD	Call forward
CONF	3-way conference
ENTER	This is "ENTER", accept setting
DEL	This is "Delete", Delete word or phone number
HOLD	This is "HOLD" function
CONTACTS	This is "CONTACTS",Phone Book
FLASH	This is "FLASH" function
RD	This is "RD" the same number again
SPK	This the Speaker Phone

5 Phone Functions

5.1 Making Calls over the Internet

User can call another VoIP terminal or any PSTN telephone through Internet by simply dialing the destination number as you would with on any other phone. Please note that there are dialing patterns required and areas you are allowed to dial may vary. Please consult your service provider.

5.2 Receiving Calls over the Internet

When there is a call, answer it as you would as on any phone.

5.3 Speaker

Press SPEAKER on the phone to have a hands free call, press SPEAKER again to hang up or pick up the handset to have normal call.

5.4 Date and Time display

After you set the SNTP (synchronized to the Internet) or phone's date and time, date and time will show on the screen.

5.5 Call Duration display

The numbers will show on the screen.

5.6 Work as router/bridge

This terminal can work as a family router/ bridge, you can set it on the web: Network->WAN Settings. Please select the type of the network as you want.

! Note: We recommend you use it as a secondary router.

5.7 Volume Adjust

In WEB page: Phone Setting-> Volume Settings.

You can also use keypad to output volume of speaker or handset by Up/Down when hook off.

5.8 Phone book

By WEB page: Phone Book->Phone Book, you can set the phone list.

Using the phone: press MENU then use up/down to select the 'Phone Book' , press ENTER and use up/down to select the 'Add entry', then press ENTER to add a contact to the list.

After you set them, press CONTACTS on the phone, then you can check the list by name or press ENTER again to check them one by one.

5.9 Call list

Press CALLLIST, then you can check the DIALED, MISSED and RECEIVED calls. Press UP/DOWN to check the RECEIVED/DIALED calls when the phone is idle.

5.10 Speed dial

In WEB page: Phone Book->Speed Dial Settings, you can set the speed dial numbers.

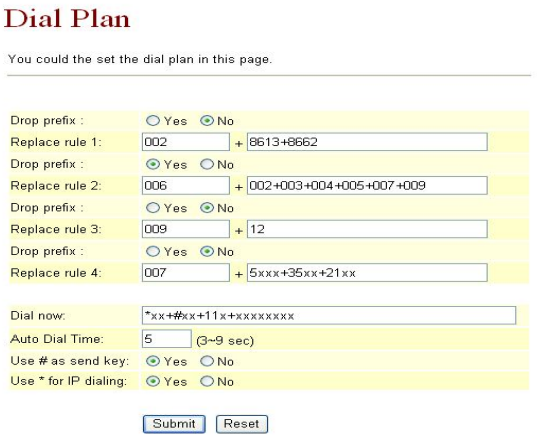
You can press number+# to dial out the dial number too

5.11 Melody Selection

In WEB page, you can select the melody of ringer or make it on/off.

You can press MENU and then use up/down to select the 'Phone Setting', press ENTER and use up/down to select the 'Ringer', and press ENTER again. Then you can set the volume of ringer in 'Ringer Volume' and select the melody in 'Ringer type'.

5.12 Dial Plan


Dial Plan
You could the set the dial plan in this page.
Drop prefix : Yes No
Replace rule 1: 002 + 8613+8662
Drop prefix : Yes No
Replace rule 2: 006 + 002+003+004+005+007+009
Drop prefix : Yes No
Replace rule 3: 009 + 12
Drop prefix : Yes No
Replace rule 4: 007 + 5xxx+35xx+21xx
Dial now: *xx+#xx+11x+xxxxxxxx
Auto Dial Time: 5 (3~9 sec)
Use # as send key: Yes No
Use * for IP dialing: Yes No
Submit
Reset

Drop Prefix	-No: when dialed number matches with the rule, the number will be dialed without any change except adding the prefix. You can input 7 numbers. -Yes: when dialed number matches with the rule, the specified prefix that matched the rule will be removed before adding the prefix in the left box. You can input 31 numbers.

Replace rule	Set dialing rule. Left box is for the prefix to be added. Right box is for the rule to be matched so that action will be taken by adding the prefix on the left.
Dial Now	When the number matches with the rule of “Dial Now”, numbers will be sent out automatically. The first number shall not be set as 0, because 0 means not to use the rule “Dial Now”. Therefore, when the “Dial Now” is set as 0xxxx, the number will not be dialed out as the rule, because the first number is 0.
Auto Dial Time	The default setting is 5 (seconds). While dialing a number, once the user stops pressing the keypad for 5 seconds, the device will commence the dialing process. You can set this option within the range of 3-9 seconds.

Use # as send key	The default setting is Yes. When set to Yes, "#" can be used as a key to finish dialing and not wait for the Auto Dial Time to finish.
Use * for IP Dialing	The default setting is Yes. When set to Yes, the (*) will be recognized as (.) so that you can call an IP address instead of a number.

Example:

Example n.1:

Drop prefix: No, Replace rule 1: 002, 8613+8662

Explanation:

If the first four digits of the number dialed by the user are 8613 or 8662, the device will automatically append the number 002 in front of the dialed number, therefore the number that will be dialed out is [002+8613+xxx] or [002+8662+xxx] depending on which of the two numbers were dialed

Example n.2:

Drop prefix: Yes, Replace rule 2: 006,

002+003+004+005+007+009

Explanation:

If the first three digits of the number dialed by the user ae 002, 003, 004, 005, 007 or 009, the device will drop all these numbers and replace it with 006, therefore the number that will be dialed out is [006+xxx]

Example n.3:

Drop prefix: No, Replace rule 3: 009, 12

Explanation:

If the first two numbers dialed by the user is 12, the device will automatically append the number 009 in front of the dialed number, therefore the number that will be dialed out is [009+12+xxx]

Example n.4:

Dial Now: *xx+#xx+11x+xxxxxxxx

Explanation: If the first numbers dialed by the user match one of the rules (*xx or #xx or 11x or xxxxxxxx), the numbers will be dialed automatically, the system will not wait for any new numbers to be pressed before dialing out the number.

6 Service Features

Important Note: Your service provider may not support all service features to some or all callers.

6.1 Caller ID display

When there is a incoming call, the screen will show you the caller ID.

6.2 Call Forwarding

6.2.1 Unconditional Call Forward

The incoming call will always forward to the destination number. Please set this function in web page: Phone Setting->Call Forward.

6.2.2 No Answer Call Forward

The incoming call will forward to the destination number if there is no answer within the time you have set. Please set this function in web page: Phone Setting->Call Forward.

6.2.3 Busy Call Forwarding

Another incoming call will be forwarded to the destination number set during a phone call. Please set this function in the web page: Phone Setting->Call Forward.

6.3 Call Hold/Retrieve

Operation: While on a call, press 'HOLD' button on the phone then the call will be on hold. You can dial the new number. To retrieve the previous call just presses it again.

6.4 Call Transfer

Attendant Transfer

Operation: While B call A, press 'FLASH' button. Input the destination number and '#', after someone pickup the call you can tell her/him there is a call for him and hung up, then the call will be transfer to C.

6.5 3-way calling

Operation: While A and B is on the call, press 'HOLD' button, input the 3rd party's number and '#'. After the one pickup the call, you can press 'CONF' to begin a 3-way calling.

6.6 Call waiting/Answer the waiting call

When on a call and a new call comes in, you will hear the waiting tones. Press the 'HOLD' key on the phone to pick up the new call.

6.7 Display Missed Call

When there is a missed call on the server, the device will get a signal from server and you will see the information '1 Miss Call' on the screen.

6.8 Voice mail

When there is a voice mail on the server. The device will get a signal from server and you will see the indicator of SPEAKER twinkle.

6.9 Multiple lines

You can set 3 different accounts and server information on the device. When the device is idle, pick 1*, 2*, 3* to select the 1st 2nd and 3nd line, then hang up the handset or press 'SPEAKER' key, you will be speaking on the chosen line.

1st account is the default one after a reboot.

6.10 VoIP: Do not disturb

You can set in the web page: Phone setting->DND Settings. If you set it on, all incoming calls don't cause the device ring, but leave the unreceived record on the LCD screen. You can set this feature for a specific block of time. If the end time is earlier than the begin time, it means the DO NOT DISTURB duration will be from beginning time to next day's end time.

The screen will show #DND#, and the phone now is in DO NOT DISTURB status. You can set in the web page: Phone setting->DND Settings. If you set it off, then the phone is idle and it will change the phone to normal status.

7 Upgrade

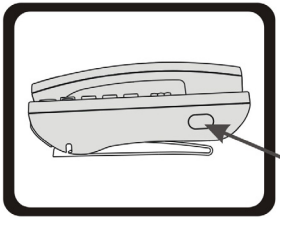
Use your IE explorer to open upgrade web page, select the file and submit. The device will upgrade now. You may need to restore the factory defaults after you upgrade it to a new version.

Note: you may lose all the settings in the device especially including account and server information.

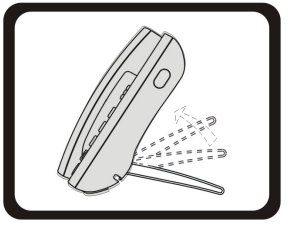
Warning: Do not let your device lose power during the upgrading process, otherwise it may be damaged!

8 How to use the support

To change the stand angle, please follow the pictures:



Press the button



Change the angle